

TOWN OF NANTUCKET BOARD OF HEALTH REGULATIONS  
LOCAL REGULATION 75.00  
THE CONTENT AND APPLICATION OF FERTILIZER FOR USE ON  
NANTUCKET

SECTION 1. FINDINGS

1.1. There is sound scientific evidence to conclude that nitrogen and phosphorus in fertilizers are contaminants that negatively affect fresh and salt waters when present in excessive amounts. These excessive amounts of nitrogen and phosphorus contribute to undesirable algal and aquatic plant growth within all Nantucket water bodies. This undesirable algal and aquatic plant growth has an adverse affect on public health through the degradation of waters used for drinking water, shell fishing, and recreational swimming and boating.

1.2 With regard to the above, the Massachusetts Estuaries Program (MEP) has completed reports detailing the excessive nutrient loading of Nantucket's harbors, embayment's, salt ponds and coastal resources from multiple sources, including fertilizers. The MEP considers fertilizers as a "locally controllable source" of degradation to the water resources of Nantucket. As a result of the completed MEP Reports in Nantucket Harbor, Polpis Harbor, Madaket harbor, Long Pond and Sesechacha Pond, the Massachusetts Department of Environmental Protection (MassDEP) has issued Total Maximum Daily Loads (TMDLs) in these waters. These TMDLs are directives that the Town must meet with its water quality, which is enforced through the Federal Clean Water Act .Compliance with Regulation 75.00 will serve to reduce excessive nitrogen loadings to our water resources thus providing a partial solution to meet the TMDLs.

1.3. Nantucket has significant amounts of glacially deposited coarse, sandy soils that are subject to rapid water infiltration, percolation, and leaching of nutrients. These soil characteristics mean that normal agronomic practices of soil fertilization and amendment do not necessarily apply on Nantucket.

SECTION 2. PURPOSE

2.1. It is necessary to control by regulation in the Town and County of Nantucket the use of fertilizer that contains phosphorus and nitrogen so as to improve and restore the quality of its water resources.

2.2. This regulation provides for a reduction of nitrogen and phosphorus deposition into Nantucket's waters and wetlands by means of an organized system of education, licensure, and regulation of practice and should help Nantucket to achieve compliance with the embayment specific Total

Maximum Daily Loads (TMDLs) prescribed by the Commonwealth of Massachusetts for controllable nitrogen and phosphorus in its water resources.

### SECTION 3. AUTHORITY

3.1. This Regulation is adopted by the Town of Nantucket's Board of Health as authorized by Massachusetts General Laws, Chapter 111, Section 31.

SECTION 4. DEFINITIONS; for the purposes of this Regulation, the following words shall have the follow meanings unless the context clearly indicates a different meaning:

"Agriculture" means farming in all of its branches and the cultivation and tillage of the soil, the production, cultivation, growing, and harvesting of any agricultural, floricultural or horticultural commodities. For the purposes of this regulation, agriculture means the raising of crops for commercial sale, where the threshold of commercial is two thousand five hundred dollars (\$2500.00) or more of gross sales per calendar year, measured as an average over a five-year period. See also "Horticulture."

"Amendment" refers to the application of substances to soils and plantings; amendments include but are not limited to fertilizers and may include other soil conditioners such as lime, compost, and other organic materials.

"Applicator" means any person Who applies fertilizer to plants and soils.

"Best Management Practice," BMP, means a sequence of activities designed to limit a nonpoint pollution source. For the purposes of this regulation and pursuant to Section 5.1 of this regulation, BMP means the current edition of "Best Management Practices for Fertilizer Use on Lawn and Landscape Plantings on Nantucket, MA."

"Combination Products," sometimes known as "weed and feed," means any product that, in combination with fertilizer, contains weed killer, defoliant, crabgrass preventer, or any other chemical for restricting the growth of plants other than turf.

"Compost" is partially decomposed organic matter that is used as a soil amendment. Compost is considered a fertilizer for the purposes of this regulation.

"Compost tea" is a liquid infusion of compost that is used as a soil amendment or foliar fertilizer. Compost tea is considered a fertilizer for the purposes of this regulation.

"Continuing education hours" means elapsed or actual time spent in an educational, professional-development activity.

"Fast-acting nitrogen" means any water-soluble nitrogen that is immediately available to plants upon application.

"Fertilize, fertilizing, or fertilization" means the act of applying fertilizer to plants or soils.

"Fertilizer" means a substance that enriches the soil with elements essential for plant growth, such as nitrogen, phosphorus, or oilier substances; fertilizer does not include those nutrients that are normally excluded from fertilizer such as chemically part of dolomite, limestone, or lime. Fertilizer includes foliar fertilizers, as defined below.

"Foliar Fertilizer" means any fertilizer product designed for uptake into a plant through its leaves and which typically are sprayed directly onto a plant.

"Fertilizer License" means that documentation denoting an individual or corporate entity has demonstrated, by means of an examination, competency in applying fertilizer on properties within the Town & County of Nantucket.

"Health Agent" or "Health Director" signifies the individual who has direct oversight of the daily activities of the Nantucket Health Department.

"Horticulture" is a general term meaning plant science and plant products. For the purposes of this Regulation, horticulture means the raising of flowers, fruits, vegetables, berries, herbs, nuts, and other similar products for commercial sale, where the threshold of commercial is two thousand five hundred dollars (\$2500.00) of gross sales per calendar year measured as an average over a five year period. See also "Agriculture."

"Impervious surface" means a surface that has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water.

"Landscape professional" means a person who, in exchange for money, goods, services, or other consideration, applies fertilizer to plants or soils.

"Landscaping" means establishment by sod, seeding, or transplanting, renovation, maintenance, or fertilization of turf and other plantings.

"Licensed applicator" means a person authorized by the Nantucket Board of Health or Health Agent to apply fertilizer for commercial purposes.

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"Nantucket" encompasses the land and water of the Town and County of Nantucket including Tuckernuck and Muskeget.

"Nantucket Board of Health" means that local Board appointed by the Board of Selectmen to oversee public and environmental practices through the actions of its Health Department within the Town and County of Nantucket.

"Nantucket BMP" is the current edition of the "Best Management Practices for Fertilizer Use on Lawn and Landscape Plantings on Nantucket, MA." Pursuant to Section 5.1 of this Regulation, the Nantucket BMP is adopted by the Board of Health and is generally available to the public.

'Nantucket; Town and County of' means the bodies politic created by state statute (of the Commonwealth of Massachusetts General Court) to govern said lands and waters.

"Nonpoint Pollution" means contamination which includes but is not limited to sediments, nutrients, pathogens, and pollutants that collect in water-bodies from storm water runoff." (301 CMR 26.03, "Definitions" in the "Coastal Pollutant Remediation Program")

"Nonpoint Pollution Source (NPS)" means any activity releasing pollution that is not deemed point-source pollution.

"Nutrient" means any of the following 16 elements needed for growth of a plant; the three (3) non-mineral elements: carbon, hydrogen, and oxygen; the six (6) macronutrients: nitrogen, phosphorus, potassium, calcium, magnesium, and sulphur; and the seven (7) micronutrients: boron, copper, iron, chloride, manganese, molybdenum, and zinc.

"Nutrient management" means systematic control of the application of nutrients.

"Plantings" means organized cultivation of plants for beneficial purposes.

"Plants" are biological organisms in the *Kingdom Plantae* that, for the purposes of this Regulation, are used domestically.

"Point-Source water pollution" comes from end of pipe stationary locations such as sewage treatment plants, factories, and ships and is subject to regulatory control under the Massachusetts Clean Water Act and the Federal Water Pollution Control Act, both as amended .

"Slow-release, controlled-release, timed-release, slowly available, or water insoluble nitrogen" means nitrogen in a form that delays its availability for plant uptake and use after application and is not rapidly available to turf and other plants.

"Soil" means the upper-most layer of the earth's surface, comprised of mineral and organic matter, which can host biological communities.

"Soil test" means a technical analysis of soil conducted by an accredited soil testing laboratory.

"Total Maximum Daily Load / TMDL" is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards.

"Turf" means grass-covered soil held together by the roots of tire grass, also **known as '~sod~~ or "lawn."**

"Waters" or "Water-bodies" or "Water Resources" include but are not limited to, streams, including intermittent streams, creeks, rivers, freshwater and tidal wetlands, ponds, lakes, marine waters, canals, lagoons embayment's, and estuaries within the Town and County of Nantucket, including without limitation all waters defined in Massachusetts General Laws Chapter 131, Section 40 and Town of Nantucket Code Section 136 .

## SECTION 5. STANDARDS OF PERFORMANCE

### 5.1. Nantucket Best Management Practices

The Nantucket Board of Health shall adopt the document known as the Nantucket Best Management Practices ("Nantucket BMP"), which shall be incorporated into and be part of this Regulation. The initial version of the Nantucket BMP has been developed by a broad group of stakeholders representing diverse interests and has been reviewed by soil and turf scientists and educators. It is based on principles of soil science appropriate to Nantucket soils and climate. Therefore, notwithstanding the requirements of G.L. c. 111, §31, no amendment to the Nantucket BMP shall be adopted

until such time as the Nantucket Board of Health shall hold a public hearing thereon, notice of the time, place and subject matter of which, sufficient for identification, shall be given by publishing in a newspaper of general circulation in the Town and County once in each of two successive weeks, the first publication to be not less than fourteen days prior to the date set for such hearing. No such amendment shall be effective unless the proposed amendment has been reviewed and commented upon by soil and turf scientists and educators and it is passed by a four-fifths vote of the Nantucket Board of Health.

## 5.2. Performance Standards for Non-Licensed Applicators:

Applicators who do not hold Fertilizer Licenses issued in accordance with Section 6.2 of this Regulation shall comply with the following standards:

5.2.1. Applicators shall not apply fertilizer immediately before or during heavy rainfall, such as but not limited to thunderstorms, hurricanes, or north eastern storms, or when the soil is saturated due to intense or extended rainfall;

5.2.2. Applicators shall not apply fertilizer between October 16th and the following April 14<sup>th</sup>;

5.2.3. Applicators shall not apply, spill, or deposit fertilizer on any impervious surface and fail to remove the applied, spilled, or deposited fertilizer immediately, or to apply fertilizer in a manner that allows fertilizer to enter into storm drains or other man-made storm flowage receptacles and/or channels.

5.2.4. Applicators shall not apply fertilizer closer than 100 feet to any water-body as defined above unless a permit is obtained from the Nantucket Conservation Commission allowing such activity [This reflects current Nantucket Wetland Regulations];

5.2.5. Applicators shall not deposit grass clippings, leaves, or any other vegetative debris into or within 25 feet of water-bodies, retention and detention areas, drainage ditches or storm water drains, or onto impervious surfaces such as, but not limited to, roadways and sidewalks, except during scheduled clean-up programs.

5.2.6. The following restrictions shall apply to the content of fertilizer to

be applied to turf, other plants, or soil by such non-licensed Applicators.

5.2.6.1. An Applicator shall not apply more than 0.251b Nil 000 sq ft of fast-release nitrogen fertilizer in anyone application.

5.2.6.2. An Applicator shall not apply fertilizer that contains phosphorus, unless a soil test indicates a phosphorus deficiency and it is applied in conformance with the Nantucket BMP.

5.2.6.3. Applications of compost, which contain phosphorus, may only be applied in conformance with the Nantucket BMP.

5.2.7. A single application of nitrogen for turf shall not exceed 0.5 pounds of actual nitrogen per thousand square feet and the annual rate shall not exceed 3.0 pounds of actual nitrogen per thousand square feet; a single application for trees, shrubs, herbs and other ornamental plantings shall not exceed 0.5 pounds of actual nitrogen per thousand square feet and the annual rate shall not exceed 2.0 pounds of actual nitrogen per thousand square feet.

5.2.8. Applications of nitrogen shall be done at intervals of no less than two weeks until the annual maximum is reached.

5.2.9. The fertilizer application requirements of Section 5.2.7. shall apply without limitation to the application of combination products.

5.2.10. Foliar fertilizers shall be applied in compliance with the Nantucket BMP. The nitrogen application rate of foliar products shall be included when calculating the annual total nitrogen application rate.

5.2.11. Compost and compost tea shall be applied in compliance with the Nantucket BMP. The nitrogen and phosphate application rates of compost and compost tea shall be included when calculating the annual total fertilizer application rate.

### 5.3 Performance Standards for Licensed Applicators

5.3.1. Licensed Applicators shall be exempt from the performance standards set forth in Section 5.2 of this Regulation, provided that they comply with the requirements of Section 5.3.2 of this Regulation.

5.3.2. All applications of fertilizer by a Licensed Applicator shall be in

accordance with the Nantucket BMP, as amended, at the time of the application.

5.4. Exemptions. The following activities shall be exempt from Sections 5.2. and 5.3.

5.4.1. Application of phosphorus when establishing vegetation, after land disturbance, and when re-establishing or repairing turf after substantial damage, provided the application is in compliance with the Nantucket BMP. When applied within 100 ft of any water-body such application requires a permit from the Nantucket Conservation Commission [This reflects current Nantucket Wetland Regulations].

5.4.2. Application of fertilizer for agricultural and horticultural uses, including sod farms.

## SECTION 6. EDUCATION, LICENSURE, ENFORCEMENT, AND PENALTIES.

### 6.1. Education

6.1.1. The Town of Nantucket Board of Health SHALL maintain a program of fertilizer education that is based on the Nantucket BMP.

6.1.2. The Nantucket Board of Health SHALL administer an assessment to determine an individuals' proficiency with respect to the Nantucket BMP.

6.1.3. Summaries of fertilizer application requirements will be made readily available to the public by the Nantucket Board of Health.

### 6.2. Licensure

6.2.1. No Landscape Professional shall apply fertilizer in the Town and County of Nantucket without a License issued by the Nantucket Board of Health in accordance with this Regulation. Such License may be held but is not required by property owners who apply fertilizer on their own property.

6.2.2. Fertilizer Licenses shall be effective beginning on January 1st in the year of issue, and shall be in effect for three calendar years, unless previously revoked in accordance with Section 6.3 of this Regulation.



6.2.3. Fertilizer Licenses may be renewed on application. Renewal applications shall be submitted to the Nantucket Board of Health no later than December 1st of the year preceding the year for which renewal is sought.

6.2.4. Any application for a Fertilizer License or for renewal of a Fertilizer License shall be accompanied by a fee in the amount of \$100.00 and certification that the applicant has shown proficiency of the Nantucket BMP as determined by the Nantucket Board of Health, as set forth in Section 6.1.2 of this Regulation.

6.2.5. Any Landscape Professional licensed under this Regulation shall keep said License in his\her possession which shall be readily available for display. The License shall indicate the license number and shall include the Licensee's signature and date of the license expiration. The Licensee shall display such license when requested to do so by any officer of the Nantucket Police Department or Nantucket Board of Health.

### 6.3. Enforcement

#### 6.3.1. License Suspension or Revocation

The Nantucket Board of Health may suspend or revoke any license issued pursuant to this Regulation or any other applicable law. Such revocation or suspension may take place after a hearing held by the Nantucket Board of Health of which the license holder shall be given seven (7) days written notice. Such notice shall be deemed given upon certified return receipt mailing same to the address listed 011 the license application.

#### 6.3.2. Non-Criminal Disposition

This Regulation may be enforced by the Nantucket Health Director, Assistant Health Officer and/or any Police Officer of the Town of Nantucket. Whoever violates any provision of this Regulation may be penalized by a noncriminal disposition process as provided in Massachusetts General Laws c chapter .40, section 21D and the Town's non-criminal disposition by-law, Sections 1-2, 1-3, 1-4, 1-5, and 1-6 of the Code of the Town of Nantucket. If non criminal disposition is elected, then any person who violates any provision of this Regulation shall be subject to a penalty in the amount of three hundred dollars (\$300.00) per day for each day of violation, commencing ten days following day of receipt of written notice from the Nantucket Board of Health. Each day or portion thereof shall

constitute a separate offense. If more than one, each condition violated shall constitute a separate offense.

#### 6.3.3. Other

Whoever violates any provision of this Regulation may be penalized by indictment or on complaint brought in the district court. Except as may be otherwise provided by law and as the district court may see fit to impose, the maximum penalty for each violation or offense shall be one thousand dollars (\$1,000). Each day or portion thereof shall constitute a separate offense. If more than one, each condition violated shall constitute a separate offense.

The Nantucket Board of Health may enforce this Regulation Of enjoin violations thereof through any lawful process, and the election of one remedy by the Nantucket Board of Health shall not preclude enforcement through any other lawful means.

### SECTION 7. SEVERABILITY CLAUSE

Should any section, part or provision of this Regulation be deemed invalid or unconstitutional, such decision shall not affect the validity of the remaining terms of this Regulation as a whole or any part thereof, other than the section, part Of provision held invalid or unconstitutional.

### SECTION 8. AMENDMENTS

This Regulation is based on the Nantucket BMP and was developed by a broad group of stake holders representing diverse interests and has been reviewed by soil and turf scientists and educators. Therefore, notwithstanding the requirements of G.L. c. 111, §31, no amendment to this Regulation shall be adopted until such time as the Nantucket Board of Health shall hold a public hearing thereon, notice of the time, place and subject matter of which, sufficient for identification, shall be given by publishing in a newspaper of general circulation in the Town and County once in each of two successive weeks, the first publication to be not less than fourteen days prior to the date set for such hearing. No such amendment shall be effective unless the proposed amendment has been reviewed and commented upon by soil and turf scientists and educators and it is passed by a four fifths vote of the Nantucket Board of Health.

### SECTION 9. EFFECTIVE DATE

This Regulation shall take effect on January 1<sup>st</sup> 2013 and upon publication pursuant to G.L. c. 111, §31.

## SECTION 10. INTERIM PROVISIONS

Landscape Professionals may apply fertilizer without a license during the interim period between the effective date of this Regulation and the development of a licensing program by the Nantucket Board of Health, provided that they comply with Section 5.3.2 of this Regulation.[printed: 2012-06-13]